

AMENDMENTS TO THE SPECIFICATION

Please amend the first paragraph in Example 1 on page 28 (lines 7-16) as follows:

L. fermentum BR11 was grown in standing MRS broth at 37°C and fractions were taken at five timepoints (Figure 1). SDS-PAGE analysis revealed a number of proteins which accumulated in the supernatant during growth (Figure 1). The smallest visible protein (indicated by the arrow) was still abundant in late stationary phase when the level of a number of other proteins had reduced. This protein was called Sep for small exported protein. When its small size is taken into account, Sep is one of the most abundant proteins found in the supernatant of *L. fermentum* BR11. To further characterise Sep we identified the N-terminal sequence which was found to be: DTIYTVQSGDTLSGI. (SEQ ID NO: 34). Sep is a 205 amino acid protein with a 30 amino acid N-terminal secretion signal giving rise to a predicted 19-kDa mature protein with an isoelectric point of 5.3.

Please amend the second paragraph of Example 2 on page 28 (lines 22-30) as follows:

The region encoding the amino-terminal 1 to 216 amino acids of the mature E-cadherin protein was amplified by PCR from cDNA template prepared from cultured mammalian T47D and LNCap cells using oligonucleotides E-cad-PstI and E-cad-XhoI (Table 4; SEQ ID NOS: 32 and 33 respectively). This fragment was cloned in frame downstream of DNA encoding the Sep secretion signal to generate construct Sep-6xHis-Ecad. The sequence of the cloned E-cadherin DNA fragment which contained an introduced stop codon after codon 216 was checked by DNA sequencing. The putative *bspA* transcription terminator was amplified using oligonucleotides Term-Xho and Term-Hind and cloned downstream of the E-cadherin encoding DNA.

Please amend the second paragraph of Example 3 on pages 30 to 31 (page 30, line 24 to page 31 line 4) as follows:

The construct (Sep-6xHis-Sep) consists of DNA upstream of *sep* and the *sep* 5' region encoding the secretion signal and a six-histidine (His6) epitope

(amplified and cloned using Nterm-US-Xba (SEQ ID NO: 28) and Nterm-Pst-US (SEQ ID NO: 29)) and DNA encoding the mature Sep protein and the putative sep transcription terminator (amplified and cloned using SepDS- PstXho (SEQ ID NO: 30) and SepDS-ApaSal (SEQ ID NO: 31)). The construct (BspA-6xHis-Sep) consists of DNA encoding the mature Sep protein and putative sep transcription terminator as above but instead contains upstream DNA encoding a full length BspA protein followed by DNA encoding the BspA secretion signal and a His6 epitope as described previously (Turner et al., supra). The extra amino acids added onto the mature N-termini of Sep in the Sep-6xHis- Sep construct are: DTIYTDHHHHHSAAGSR (SEQ ID NO: 21) and in the BspA-6xHis-Sep construct are: ASDDVHHHHHSAAGSR (SEQ ID NO: 22).

Please amend footnote “a” under Table 4 on page 40 (the second line) as follows:

a. Underline indicates restriction endonuclease recognition sites (SEQ ID NOS: 23-33 respectively).